PATENT CLAIMS

1. A process or method for collecting colloidal solids in solution characterized by the following steps :

a) Employing iron tubes in solution with suspended colloidal solids, and each of said tubes having a DC switch with an electric double wire chord, which supply each tube with a negative charge through one wire and can be switched to a positive charge through the other wire.

b) Any of said tubes in solution having negative charge are attracting build up of said colloidal solids on the surface of said tubes.

c) One of said tubes with colloidal solids attached is moved out of said solution into an enclosure for draining and drying of said colloidal solids, before said charge is changed to positive, loosing said tube's attraction to said build up of colloidal solids and with very dry air blow it through an outlet for removal.

2. A process according to claim **1.** characterized in that in step a) said solution is inside a scrubber and all said tubes being long and enclosed, hanging from a closed loop conveyor, mounted to brackets under a rain shield along surrounding walls of said scrubber, wherein colloidal solids is being produced or exist in solution.

3. A process according to claims **1 – 2,** characterized in that said scrubber has a room attached, with and opening and door to said scrubber, and said closed loop conveyor has a narrow part extending into said room, and one of said tubes at the time is moved into said room with its negative charge and attached colloidal solids for its drainage and drying with circulating very dry air, thereafter said door is closed and the charge switched to positive, making said colloidal solids become loose for removal through an outlet for valuable recovery.

4. A process according to claims **1 – 3,** characterized in that a central bracket near the top of said scrubber has rotating DC outlets connecting each of said

chords to a DC switch on said tubes

5. A process according to claims **1 – 4,** characterized in that when said Scrubber are too wide for use of chords, an AC receiver with a rectifier powers said DC switch on said tubes.

6. A process according to claims **2 – 5,** characterized in that said door between said room and said scrubber is a nylon door rolled up over a guide shaft on to a drive shaft, where top of door is connected. Stings each side at bottom of said door extend down below door opening over a spring loaded shaft, which keep strings and door tight, and up over said guide shaft and is fasten opposite way, each side of said door on said drive shaft, that have circular separation plates and a drive sprocket, which is unwinding and closing said door as string roll up, and rolls up to close said door as strings unwind.

7. A process according to claim **1 - 4,** characterized in that in step a) said solution is a liquid, with some colloidal solids washed down from said scrubber to a clarifier below, where said liquid flows through a hole near its bottom up through an attached overflow duct and out over a weir, and said tubes with a hole top and bottom and a DC switch with negative charge is placed in said duct, attracting on the inner and outer surfaces a build up of said colloidal solids..

8. A process according to claim **7,** characterized in that one at the time of said tubes with colloidal solids attached is lifted up above said weir into an enclosure attached to said scrubber, and after draining and drying said colloidal solids with upwards circulating very dry air, before changing charge in said tube to positive and very dry air is blowing downwards said colloidal solids and remove it through an outlet.

9. A process accordance to claim 1 – 7, characterized in that an air fan with an air-conditioning unit at the top of said room and said enclosure are circulating very

dry air upwards to dry said connected colloidal solids, and later blow said loose colloidal solids through said outlet into a large and tall .tank with cyclonic and centrifugal action and renewed DC charge, for separation of circulating dry air, the heavy sodium carbonate and the light ammonium chloride, which is used for recycling of ammonia gas for said desalination seawater process.

10. A process accordance to **proceeding** claims, characterized in that said process is improved for said 3 closely spaced scrubbers with attached room and enclosure and each scrubber having a clarifier below with attached overflow duct and weir, wherein all said seawater with said 3 % salt compound, enters scrubber No 1 and its effluent is pumped to scrubber No 2 and its effluent is pumped to scrubber No 3 But the required 102 % of said CO_2 enters scrubber No 3, and flows directly to scrubber No 2, and then directly to scrubber No 1, where about 96 % of CO_2 will brake apart about 94 % of said 3 % salt compounds in said seawater. Only 2 % of said 102 % CO is emission to the sky. The rest 0,018 % of said salt compounds enter scrubber No 2, where 16 CO_2 molecules for each salt compound molecule, are braking apart practically all of them. In scrubber No 3, there are millions of CO_2 molecules for each remnant salt compound molecule to seek and brake them up, leaving said seawater with no objectionable salt.

11. A process according to **proceeding** claims , characterized in that where it is needed, said seawater can be sterilized by infrared light to kill any organic substance, which can be removed by flocculation in a process tank with a free standing partition where a vertical aerator at the end aerate and flocculate the circulating seawater numerous times before it overflows into a clarifier, where the sludge from flocks and organics settle and is repeatedly returned to process tank before it is wasted, and clear seawater overflows with very low, acceptable BOD.